

ABSTRACT OF THE DISCLOSURE

A substrate processing apparatus is provided. When a wafer W held by a holding unit 35 is accommodated in a processing chamber 34a of a processing container 34 equipped with a heater 31A, the wafer W is heated to a processing temperature while positioning the wafer W at an adjacent position Pa resulting from making the wafer W approach the heating surface of the heater 31A, i.e. flat bottom surface of a container body 32. After heating the wafer W to the predetermined temperature, the wafer W is separated from the flat bottom surface of the container body 32 to a processing position Pb. In this state, a processing chamber 34a of the processing container 34 is supplied with a processing fluid, while the holding unit 35 and the heater 31A are relatively moved close to and apart from each other intermittently or continuously. Accordingly, it is possible to heat the substrate to a processing temperature in a short time while supplying the substrate with the processing fluid uniformly, accomplishing the improvement in throughput and the homogenization in processing.